IN THE CLAIMS:

1. to 12. (Canceled)

13. (Previously Presented) A method of producing a substrate with an electrode, comprising the steps of:

providing a substrate made of synthetic resin;

forming an undercoat layer made of an organic material on a surface of the substrate to relieve stress caused by the difference in a coefficient of thermal expansion between the substrate and an electrode formed thereon;

forming as the electrode an oxide conductive film consisting of an amorphous material or consisting essentially of an amorphous material on the substrate having formed thereon the undercoat layer at a temperature equal to or less than the crystallization temperature of the film; and

crystallizing the oxide conductive film by heating.

14. (Original) The method of producing a substrate with an electrode according to claim 13, wherein in the step of forming an oxide conductive film, the oxide conductive film is heated at a temperature of 150°C or less.

15. (Original) The method of producing a substrate with an electrode according to claim 13, wherein in the step of crystallizing the oxide conductive film, the oxide conductive film is heated at a temperature equal to or less than the crystallization temperature.

16. (Original) The method of producing a substrate with an electrode according to claim 13, wherein in the step of crystallizing the oxide conductive film, the oxide conductive film is heated at temperature equal to or less than the glass transition temperature of the substrate.

17. (Original) The method of producing a substrate with an electrode according to claim 13, wherein the step of crystallizing the oxide conductive film is carried out in an atmosphere free of oxygen.

18. (Original) The method of producing a substrate with an electrode according to claim 13, wherein the oxide conductive film is made of indium oxide having a portion substituted by tin.

19. (Original) The method of producing a substrate with an electrode according to claim 18, wherein the oxide conductive film has a tin oxide content of less than 5% by weight.

20. (Original) The method of producing a substrate with an electrode according to claim 13, wherein, in the oxide conductive film to be formed on the substrate, crystal grains having an average grain size of 200 nm or less are dispersed in an amorphous matrix.

21. (Original) The method of producing a substrate with an electrode according to claim 13, wherein, in the step of crystallizing the oxide conductive film, the oxide conductive film is transformed into an aggregate of randomly-oriented crystals having an average grain size of 20 nm or larger.

22. (Original) The method of producing a substrate with an electrode according to claim 21, wherein the average grain size of the crystals is 300 nm or less.

23. (Original) The method of producing a substrate with an electrode according to claim 13, wherein the thickness of the oxide conductive film is 500 nm or less.

24. and 25. (Canceled)

26. (Original) The method of producing a substrate with an electrode according to claim 13, wherein, in the film completed by crystallization, the average grain size of crystal grains is in the range of 20 nm to 300 nm.

27. (Original) The method of producing a substrate with an electrode according to claim 13, further comprising a step of forming a transparent coating film on a surface of the electrode, the transparent coating film containing a synthetic resin and having a volume resistance in the range of 10^2 Ω•cm to 10^{12} Ω•cm.

28. (Previously Presented) A method of producing a substrate with an electrode comprising the steps of:

providing a substrate;

forming as the electrode an oxide conductive film consisting of an amorphous material or consisting essentially of an amorphous

material on the substrate at a temperature equal to or less than the crystallization temperature of the film; and

crystallizing the oxide conductive film by heating, further comprising a step of forming a transparent coating film on a surface of the electrode, the transparent coating film containing a synthetic resin and having a volume resistance in the range of 10^2 Ω•cm to 10^{12} Ω•cm, wherein after forming a layer made of a light-curing resin on the completed oxide conductive film and exposing regions of the layer corresponding to an electrode pattern for processing the oxide conductive film to cure and form the transparent coating film, the oxide conductive film is processed into the electrode by etching the oxide conductive film with the cured transparent coating film serving as a resist.

29. (Currently Amended) ~~A~~ The method of producing a substrate with an electrode ~~comprising the steps of:~~

~~providing a substrate;~~

~~forming an oxide conductive film consisting of an amorphous material or consisting essentially of an amorphous material on the substrate at a temperature equal to or less than the crystallization temperature of the film; and~~

~~crystallizing the oxide conductive film by heating, further comprising a step of forming a transparent coating film on a surface of the electrode, the transparent coating film containing a synthetic resin and having a volume resistance in the range of 10^2 Ω•cm to 10^{12} Ω•cm~~ according to claim 27, wherein the thickness of the transparent coating film is in the range of 0.5 μm to 5 μm.

30. (Currently Amended) A The method of producing a substrate with an electrode ~~comprising the steps of:~~

~~providing a substrate;~~

~~forming an oxide conductive film consisting of an amorphous material or consisting essentially of an amorphous material on the substrate at a temperature equal to or less than the crystallization temperature of the film; and~~

~~crystallizing the oxide conductive film by heating, further comprising a step of forming a transparent coating film on a surface of the electrode, the transparent coating film containing a synthetic resin and having a volume resistance in the range of 10^2 Ω•cm to 10^{12} Ω•cm~~ according to claim 27, wherein the thickness of the electrode is 20 nm or less.